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APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/050,498 01/16/2002		2002	Andrew M. Spencer	10014182-1	7710
22879	7590	06/04/2004		EXAMINER	
	PACKARD (2400 3404 F	CHOULES, JACK M			
P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400				ART UNIT	PAPER NUMBER
				2177	3
				DATE MAILED: 06/04/2004	1

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)				
Office Action Summany	10/050,498	SPENCER ET AL.				
Office Action Summary	Examiner	Art Unit				
The MAIL INC DATE of this communication and	Jack M Choules	2177				
The MAILING DATE of this communication app Period for Reply	dears on the cover sheet w	nn the correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPL' THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1: after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a repl - If NO period for reply is specified above, the maximum statutory period of the period of th	36(a). In no event, however, may a a y within the statutory minimum of thir will apply and will expire SIX (6) MON , cause the application to become At	reply be timely filed ty (30) days will be considered timely. ITHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).				
Status						
1)⊠ Responsive to communication(s) filed on 16 Ja 2a)□ This action is FINAL . 2b)⊠ This 3)□ Since this application is in condition for alloware closed in accordance with the practice under E	action is non-final.	• •				
Disposition of Claims	•					
4) ⊠ Claim(s) 1-21 is/are pending in the application. 4a) Of the above claim(s) is/are withdray 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) 1,2,4,5,7-11,14-17 and 19-21 is/are re 7) ⊠ Claim(s) 3,6,12,13 and 18 is/are objected to. 8) □ Claim(s) are subject to restriction and/o	wn from consideration.					
9) The specification is objected to by the Examiner.						
10)⊠ The drawing(s) filed on <u>16 January 2002</u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119	armior. Note the diagrams.	d 311100 / 1011011 01 101111 1 1 1 1 1 1 1				
·	majority condox 25 U.C.O. S	2.440(=) (4) == (5)				
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document: 2. Certified copies of the priority document: 3. Copies of the certified copies of the priority document: application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in A rity documents have been u (PCT Rule 17.2(a)).	application No received in this National Stage				
Attachment(s)	·					
1) Notice of References Cited (PTO-892)	4) Interview Summary (PTO-413) Paper No(s)/Mail Date					
Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 2/1-16-02.		nformal Patent Application (PTO-152)				

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DETAILED ACTION

1. Claims 1-21 are presented for examination.

Claim Rejections - 35 USC § 112

- 2. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 3. Claim19 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- 4. Claim 19 lists file data types and locations as being file usage information, however, the specification (see page 3 and page 7 paragraph [0020]) lists these elements as being in the file management information rather than file usage information.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 6. Claims 1-2, 5, 7, 9 10, 14-17, 20, and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Bardmesser, US patent No. 5,986,992.

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- 7. As to claim 1 and 9, Bardmesser teaches "A removable data storage device" (figure 3 note; the 'floppy disk is removable and the drive is the device that supports the removable storage further floppy drives are removable with a screwdriver as current computers will and have been able to function with floppy drives removed) comprising: "a memory..." (col. 2 lines 63-67 and col. 3, lines 1-6; note: the field of the invention in page 2 of the specification first paragraph is said to include floppy disks); "a controller..." (col. 3, lines 58-61), "a file management information structure..." (col. 3, lines 38-45); "a file usage data structure..." (col. 3 lines 38-51).
- 8. As to claims 2, 10, 15,16, and 20, Bardmesser teaches "including a scan logic..." (col. 3, lines 38-45).
- 9. As to claims 5 and 21, Bardmesser teaches "current usage data" (col. 3, lines 38-45).
- 10. As to claim 7, Bardmesser teaches "a report logic..." (fig. 5-7).
- 11. As to claim 14, Bardmesser teaches "a triggering event" (fig. 4, index S10, S12; col. 3 lines 62-67; and col. 4, lines1-4).
- 12. As to claim 17, Bardmesser teaches a "hardware device" (col. 3, lines 38-45) the computer is considered a hardware device.

Claim Rejections - 35 USC § 103

- 13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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- 14. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 15. Claims 1-2, 5, 7, 8-10, 14-17, 20, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in the background of the current invention (hereinafter the background) in view of Bardmesser, US patent No. 5,986,992. (Note: this rejection is included to address a more narrow interpretation of the claimed invention, as the above detailed 102 rejection makes a very broad interpretation of a few of the elements as noted above.)
- 16. As to claims 1, 8, and 9, the background describes a system of "A removable data storage device" (page 1 and 2 of the current specification) comprising: "a memory..." (page 2, last full paragraph [0002] and paragraph [0003] starting on page 2 and ending on page 3); "a controller..." (paragraph [0003] starting on page 2 and ending on page 3), "a file management information structure..." and (paragraph [0003] starting on page 2 and ending on page 3)
- 17. The background does not show "a file usage data structure..." However, Bardmesser describes a system, which does include "a file usage data structure..." (col. 3 lines 38-51).
- 18. It would have been obvious to one of ordinary skill in the file management art at the time of the applicant's invention to combine the teachings suggested by of Bardmesser and system

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described in the background because a system that tracks and monitors the remaining system capacity by tracking the space used by files and making it directly and accurately readable in the system of a disk or memory cartridge saves time inserting cartridge in a computer system to read the remaining memory (Bardmesser, col. 1, lines 11-30 improving the versatility of the file management system.

- 19. As to claims 2, 10, 15, 16, and 20, Bardmesser teaches "including a scan logic..." (col. 3, lines 38-45).
- 20. As to claims 5 and 21, Bardmesser teaches "current usage data" (col. 3, lines 38-45).
- 21. As to claim 7, Bardmesser teaches "a report logic..." (fig. 5-7).
- 22. As to claim 14, Bardmesser teaches "a triggering event" (fig. 4, index S10, S12; col. 3 lines 62-67; and col. 4, lines1-4).
- 23. As to claim 17, Bardmesser teaches "a hardware device" (col. 3, lines 38-45) the computer is considered a hardware device.
- 24. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bardmesser or the background and Bardmesser as applied to claim1 above, and further in view of Barney et al. US patent No. 6,212,512.
- 25. As to claim 4, Bardmesser does not detail "a file allocation table". However, Barney et al. describes a system, which includes "a file allocation table" (fig. 4 note column headings and col. 9 lines 48-64).
- 26. It would have been obvious to one of ordinary skill in the file management art at the time of the applicant's invention to combine the teachings of Barney with Bardmesser or the

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background and Bardmesser because providing the file name, size, and type is necessary to properly access and use the file in a system improving the versatility of the file management system.

Allowable Subject Matter

- 27. Claims 3, 6, 12, 13, and 18 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 28. Claim 19 would be allowable if rewritten to overcome the rejection(s) under 35
 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.
- 29. The following is a statement of reasons for the indication of allowable subject matter: As to claim 3 and 11 the art of record does not suggest, "the scan logic is one of embedded software on the removable data storage device" in a system as claimed in claim 3, claim 11 having a similar limitation. As to claim 6 the prior art of record does not suggest "the current usage data includes, for each file type of the data files, a count value and a size value and the history usage data includes counts for additions, deletions moves and copies for each file type." As to claim 12, the art does not suggest "the determining file characteristics includes determining a file type and a file size for each file as well as counts for operations performed on a file." As to claim 18, the prior art of record does not suggest the file usage structure is a linked list tree structure."

 And as to claim 19, the art of record does not suggest "an amount of space occupied by each data type" in a system as claimed.

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Conclusion

30. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Cabrera et al. US 6,189,016 B1 Usage his

Usage history in a storage volume.

Jones

US 6,145,046 A

Memory Cards with a controller.

Bielawski et al.

US 4,122,519

Memory controller with file allocation table.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jack M Choules whose telephone number is (703) 305-9840. The examiner can normally be reached on M-F (7:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Breene can be reached on (703) 305-9790. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll fee).

Jack M Choules

Primary Examiner Art Unit 2177